

1. Product and Company Identification

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Product Name Butyric Acid
Part Number RXSOL-19-1259-025

Company Details:

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

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Email mail@rxmarine.com
Website www.rxmarine.com

2. Composition / Information on ingredients

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| Chemical Name | CAS | EC number | Weight |
|---------------|----------|-----------|--------|
| Butyric Acid | 107-92-6 | 203-532-3 | 99%1 |

3. Hazards Identification

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| Signal Word | Danger |
| Hazard Statements | H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. |
| P280 Wear protective gloves.P305 + P351 + P338 | Wear eye protection/ face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Precautionary statements - response | P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P301 + P312 IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Response | None |
| Disposal | P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Prevention | P273 Avoid release to the environment. |
| Supplemental Hazard Statements | None |
| Other hazards | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |

4. First Aid Measures

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| General advice | First aiders need to protect themselves. Show this material safety data sheet to the doctor in attendance. |
| If inhaled | After inhalation: fresh air. Call in physician. |
| Eye Contact | After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses. |
| Swallowed | After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise. |
| Skin Contact | In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately. |
| Inhalation | Move to fresh air. If breathing is difficult, give oxygen. Get medical attention immediately if symptoms occur. |
| Ingestion | Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately. |
| Notes to Physician | Treat symptomatically |
| Most important symptoms and effects, both acute and delaye | The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11 |
| Indication of any immediate medical attention and special treatment needed | No data available |

5. Fire-fighting Measures

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| Flammability | May be combustible at high temperature. |
| Flash Point | CLOSED CUP: Higher than 93.3°C (200°F). |
| Suitable extinguishing media | Carbon dioxide (CO ₂) Foam Dry powde |
| Unsuitable extinguishing media | For this substance/mixture no limitations of extinguishing agents are given. |
| Special hazards arising from the substance or mixture | Carbon oxides Combustible. Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapours possible in the event of fire. |
| Further information | Remove container from danger zone and cool with water. Prevent fire extinguishing water from contaminating surface water or the ground water system. |
| Hazardous combustion products | Fire may cause the evolution of Sulphur oxides, nitrogen oxides. |
| Advice for firefighters | Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. |
| Protective Equipment | Use personal protective equipment. |
| Specific Hazards Arising from the Chemical | Has a fire-promoting effect due to the release of oxygen. Ambient fire may liberate hazardous vapours. |

6. Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert. For personal protection see section 8. |
| Spillage | Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas dike if needed. Eliminate all ignition sources. Call for assistance on disposal. |
| Personal Protection | Advice for non-emergency personnel: Avoid inhalation of dusts. Evacuate the danger area, observe emergency procedures, consult an expert. Advice |

Environmental Precaution
Methods and materials for
containment and cleaning

for emergency responders: Protective equipment see section 8.

Do not let product enter drains

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent and neutralising material (e.g. Chemizorb® H?, Merck Art. No. 101595). Dispose of properly. Clean up affected area.

7. Handling and Storage

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Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

Storage conditions

Tightly closed.

Storage class

Storage class (TRGS 510): 8A: Combustible, corrosive hazardous materials

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

Handling

Keep away from heat. Keep away from sources of ignition. Keep away from combustible material. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals

Advice on general occupational hygiene

Advice on safe handling Observe label precautions. Change contaminated clothing. Wash hands after working with substance.

8. Exposure controls and personal protection

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Occupational Exposure limit values

No data available

Biological limit values

No data available

Exposure controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk elimination area

Engineering Control

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Body Protection

Acid-resistant protective clothing

Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Full contact Material: Latex gloves Minimum layer thickness: 0,6 mm Break through time: 480 min Material tested: Lapren® (KCL 706 / Aldrich Z677558,

Size M) This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de). Splash contact Material: Nitrile rubber Minimum layer thickness: 0,11 mm Break through time: 30 min Material tested:KCL 741 Dermatril®

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Other Protection Measure

Handle in accordance with good industrial hygiene and safety practice.

Control of environmental exposure

Do not let product enter drains.

Thermal hazards

No data available



Gloves Suit

9. Physical and chemical properties

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| Physical state | Clear, liquid |
| Colour | Colorless |
| Odour | Stench. |
| Odor Threshold | Not Applicable |
| pH | 2,0 at 25 °C - DIN 19268(50% solution) |
| Melting Point | -7 - -5 °C |
| Boiling Point | 164 °C at 1.013,25 |
| Flash Point | 72 °C - closed cup |
| Evaporation Rate | Not Applicable |
| Flammability (solid, gas) | No data available |
| Explosive limits | No Data Available |
| Upper/lower flammability or explosive limits | Upper explosion limit: 10 %(V) Lower explosion limit: 2 %(V) |
| Autoignition temperature | 435 °C at 1.008 hPa |
| Decomposition temperature | No data available |
| Vapour pressure | 0,57 hPa at 20 °C |
| Density | 0,9574 g/cm ³ at 20 °C - DIN 51757 |
| Vapour Density | No Data Available |
| Specific Gravity | No data available |
| Partition coefficient | No data available |
| Explosive properties | None |
| Solubility | 10 g/l at 20 °C |
| Ignition temperature | No information available. |
| Particle characteristics | No data available |

10. Stability and reactivity

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| Reactivity | Forms explosive mixtures with air on intense heating. A range from approx. 15 Kelvin below the flash point is to be rated as critical |
| Stability | The product is chemically stable under standard ambient conditions (room temperature) |
| Possibility of hazardous reactions | Violent reactions possible with: Strong oxidizing agents chromium(VI) oxide |
| Conditions to avoid | Heat, flames and sparks. Strong heating. |
| Incompatible materials | No data available |
| Hazardous Polymerization | No data available |

11. Toxicological information

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| Acute toxicity | LD50 Oral - Rat - male and female - 1.632 mg/kg (OECD Test Guideline 401) Inhalation: No data available LD50 Dermal - Rabbit - male - 6.096 mg/kg (OECD Test Guideline 402) |
| Skin corrosion/irritation | Skin - Rabbit Result: Causes burns. - 1 h (OECD Test Guideline 404) Remarks: (Regulation (EC) No 1272/2008, Annex VI) |
| Serious eye damage/eye irritation | Eyes - Rabbit Result: Irreversible effects on the eye - 8 Days Remarks: (IUCAL) Remarks: Causes serious eye damage. |
| Respiratory or skin sensitization | No data available |
| Serious eye damage/eye irritation | No data available |
| Rout Of Entry | Inhalation. Ingestion. |
| Toxicity to Animal | WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE Acute oral toxicity (LD50): 689 mg/kg [Rat]. |
| Toxic Effects on Human | May cause damage to the following organs: upper respiratory tract. Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant, sensitizer), of ingestion, of inhalation (lung irritant, lung sensitizer). |
| Germ cell mutagenicity | Test Type: Ames test Test system: S. typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative Test Type: In vitro mammalian cell gene mutation test |
| Reproductive toxicity | No data available |
| Specific target organ toxicity - single exposure | No data available |
| Special Remarks on other Toxic Effects on Humans: | Acute Potential Health Effects: Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Eyes: Causes eye irritation. Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. May be harmful if swallowed. Inhalation: Causes respiratory tract irritation. May cause chemical pneumonitis and pulmonary edema, inflammation, edema of bronchi and larynx. Chronic Potential Health Effects: Repeated or prolonged skin exposure may cause allergic reactions in sensitive individuals. Repeated or prolonged exposure by inhalation may affect respiration and metabolism. |
| Additional Information | Endocrine disrupting properties |
| Assessment | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| Endocrine disrupting properties | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. RTECS: DK2625000 burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Damage to the eyes. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Stomach - Irregularities - Based on Human Evidence |

12. Ecological information

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| Persistence and degradability | No data available |
| Toxicity | Toxicity to fish: no data available Toxicity to daphnia and other aquatic invertebrates: no data available Toxicity to algae: no data available Toxicity to microorganisms: no data available |
| Bioaccumulative potential | No data available |
| Toxicity to fish | Flow-through test LC50 - <i>Oryzias latipes</i> - > 95,4 mg/l - 96 h (OECD Test Guideline 203) |
| Toxicity to daphnia and other aquatic invertebrates | Static test EC50 - <i>Daphnia magna</i> (Water flea) - > 100 mg/l - 48 h (OECD Test Guideline 202) |
| Toxicity to algae | Static test ErC50 - SELENASTRUM - > 998 mg/l - 72 h (OECD Test Guideline 201) |
| Eco Toxicity | Not Available |
| COD and BOD 5 | Not Available |
| Products Biodegradation: | The methods for determining the biological degradability are not applicable to inorganic substances. |
| Mobility in soil | No Information available |
| Results of PBT and vPvB assessment | This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. |
| Endocrine disrupting properties | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher |
| Assessment | The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. |
| Other adverse effects | No data available |

13. Disposal considerations

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| Disposal methods | The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems. |
| Contaminated packaging | Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials. |
| Waste treatment Method | See www.retrologistik.com for processes regarding the return of chemicals and containers, or contact us there if you have further questions. |

14. Transport information

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| UN number | ADR/RID: 2820 IMDG: 2820 IATA: 2820 |
| UN proper shipping name | ADR/RID: BUTYRIC ACID |

IMDG: BUTYRIC ACID

IATA: BUTYRIC ACID

ADR/RID: 8

IMDG: 8

IATA: 8

ADR/RID: III

IMDG III

IATA: III

ADR/RID: No

IMDG: No

IATA: No

No data available

Not classified as dangerous in the meaning of transport regulations.

No data available

Transport hazard class(es)

Packaging group

Environmental hazards

Special precautions for user

Further information

Transport in bulk according to IMO instruments

15. Regulatory information

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Safety, health and environmental regulations/legislation specific for the substance or mixture This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Safety, health and environmental regulations specific for the product in question European Inventory of Existing Commercial Chemical Substances (EINECS) -Listed. EC Inventory Listed. United States Toxic Substances Control Act (TSCA) Inventory- Listed. China Catalog of Hazardous chemicals 2015 Not- Listed. New Zealand Inventory of Chemicals (NZIoC) Listed. PICCS -Listed. Vietnam National Chemical Inventory -Listed. IECSC Listed. Korea Existing Chemicals List (KECL) -Listed.

National legislation Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances. : ACUTE TOXIC : ENVIRONMENTAL HAZARDS

DSCL (EEC) R8- Contact with combustible material may cause fire. R20/22- Harmful by inhalation and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin. R42/43- May cause sensitization by inhalation and skin contact. S22- Do not breathe dust. S24- Avoid contact with skin. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37- Wear suitable gloves.

Other regulations Take note of Dir 94/33/EC on the protection of young people at work
Chemical Safety Assessment For this product a chemical safety assessment was not carried out

16. Other information

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Other Information The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall we be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Rx Marine International has been advised of the possibility of such damages.

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